

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, DC 20460



OFFICE OF CHEMICAL SAFETY  
AND POLLUTION PREVENTION

October 29, 2014

Sharlyne S. Pyles  
Syngenta Crop Protection, LLC  
P.O. Box 18300  
Greensboro, NC 27419

Subject: Label Amendment – Removal of 28-day application timing window, addition of NYS specific restriction language, and revision of container handling language  
Product Name: Durivo  
EPA Registration Number: 100-1318  
Application Date: 8/21/14  
Decision Number: 494818

Dear Ms. Pyles:

The amended label referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act, as amended, is acceptable.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. You must submit one copy of the final printed labeling before you release the product for shipment with the new labeling. In accordance with 40 CFR 152.130(c), you may distribute or sell this product under the previously approved labeling for 18 months from the date of this letter. After 18 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. "To distribute or sell" is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR 152.3.

Your release for shipment of the product constitutes acceptance of these conditions. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6. If you have any questions, you may contact Jennifer Urbanski at 703-347-0156 or via email at [urbanski.jennifer@epa.gov](mailto:urbanski.jennifer@epa.gov).

Sincerely,

A handwritten signature in black ink that reads "Venus Eagle".

Venus Eagle, Product Manager 01  
Invertebrate-Vertebrate Branch 3  
Registration Division  
Office of Pesticide Programs

Enclosure

(Booklet)

Not for sale, sale into, distribution, and/or use in Nassau, Suffolk, Kings, and Queens counties of New York State.

**Durivo®**

**GROUP 4A 28 INSECTICIDE**

Insecticide

For control of listed insect pests infesting specified crops

Active Ingredient:	
Thiamethoxam <sup>1</sup> .....	17.5%
Chlorantraniliprole <sup>2</sup> .....	8.8%
<hr/>	
Other Ingredients:	73.7%
<hr/>	
Total:	100.0%

<sup>1</sup>CAS No. 153719-23-4

<sup>2</sup>CAS No. 500008-45-7

Durivo is a soluble concentrate containing 1.67 lb of thiamethoxam and 0.835 lb chlorantraniliprole per gallon.

**KEEP OUT OF REACH OF CHILDREN.**

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

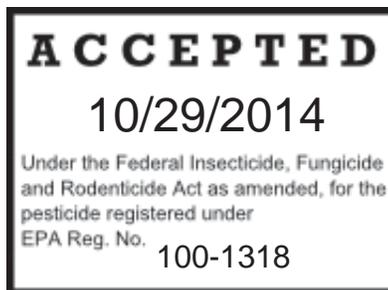
See additional precautionary statements and directions for use in booklet.

EPA Reg. No. 100-1318

EPA Est. XXXXX

SCP 1318 MAS 0911

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Net Contents



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## PRECAUTIONARY STATEMENTS

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### HOT LINE NUMBER

For 24 Hour Medical Emergency Assistance (Human or Animal) or  
Chemical Emergency Assistance (Spill, Leak, Fire, or Accident),  
Call

**1-800-888-8372**

Have the product container or label with you when calling a poison control center  
or doctor, or going for treatment.

### Hazards to Humans and Domestic Animals

#### Personal Protective Equipment

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves – Category C such as barrier laminate; butyl rubber  $\geq 14$  mils; nitrile rubber  $\geq 14$  mils; neoprene rubber  $\geq 14$  mils; polyvinyl chloride (PVC)  $\geq 14$  mils; or Viton<sup>®</sup>  $\geq 14$  mils
- Shoes plus socks

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions exist for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

#### Engineering Control Statements

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

#### User Safety Recommendations

##### Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

## **Environmental Hazards**

This pesticide is toxic to wildlife and highly toxic to aquatic invertebrates, oysters and shrimp. Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Drift or runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when cleaning equipment or disposing of equipment wash water. This product is highly toxic to bees exposed to direct treatment on blooming crops or weeds and may cause possible effects to pollinators from exposure to translocated residues in blooming crops. Do not apply this product or allow it to drift to blooming crops or weeds while bees are foraging in/or adjacent to the treatment area.

- **Surface Water Advisory**

This product may impact surface water quality due to spray drift and runoff of rain water. This is especially true for poorly draining soils and soils with shallow ground water. This product is classified as having high potential for reaching surface water via runoff for several months after application. A level, well-maintained vegetative buffer strip between areas to which this product is applied and surface water features such as ponds, streams, and springs will reduce the potential loading of thiamethoxam water from runoff water and sediment. Runoff of this product will be reduced by avoiding applications when rainfall is forecast to occur within 48 hours. (See manual at the following Internet address:

<http://www.wsi.nrcs.usda.gov/products/W2Q/pest/core4.html>)

- **Ground Water Advisory**

This product has properties and characteristics associated with chemicals detected in ground water. This chemical may leach into the ground water if used in areas where soils are permeable, particularly where the water table is shallow.

## **Physical or Chemical Hazards**

Do not use, pour, spill, or store near heat or open flame.

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## CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

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**NOTICE:** Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

The Directions for Use of this product must be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather or crop conditions, presence of other materials or other influencing factors in the use of the product, which are beyond the control of SYNGENTA CROP PROTECTION, LLC or Seller. TO THE EXTENT PERMITTED BY APPLICABLE LAW, Buyer and User agree to hold SYNGENTA and Seller harmless for any claims relating to such factors.

SYNGENTA warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. To the extent permitted by applicable law: (1) this warranty does not extend to the use of the product contrary to label instructions or under conditions not reasonably foreseeable to or beyond the control of Seller or SYNGENTA, and (2) Buyer and User assume the risk of any such use. To the extent permitted by applicable law, SYNGENTA MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS WARRANTED BY THIS LABEL.

To the extent permitted by applicable law, in no event shall SYNGENTA be liable for any incidental, consequential or special damages resulting from the use or handling of this product. **TO THE EXTENT PERMITTED BY APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF SYNGENTA AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF SYNGENTA OR SELLER, THE REPLACEMENT OF THE PRODUCT.**

SYNGENTA and Seller offer this product, and Buyer and User accept it, subject to the foregoing Conditions of Sale and Limitation of Warranty and Liability, which may not be modified except by written agreement signed by a duly authorized representative of SYNGENTA.

## DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Read entire label before using this product.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

### RESTRICTIONS

- Do not treat plants grown for transplanting.
- Not for use in nurseries, plant propagation houses, or greenhouses by commercial transplant producers on plants being grown for transplanting.
- Use this product only in commercial and farm settings.
- Not for use in home plantings.
- Not for use on ornamental plants or plants being grown for ornamental purposes.
- Do not apply to crops grown from thiamethoxam-treated seed.

The following restrictions are required to permit use of Durivo in the State of New York:

- Do not apply within 100 feet of a water body (lake, pond, river, stream, wetland, or drainage ditch).
- Aerial application of this product is prohibited.
- This product is classified as restricted in New York State.
- Not for sale, sale into, distribution, and/or use in Nassau, Suffolk, Kings, and Queens counties of New York State.
- In New York State, do not exceed a total of 0.188 lb ai of thiamethoxam-containing products per acre per growing season. This seasonal load restriction for New York State does not supersede any lower seasonal load specified in the **Crop Use Directions**.

### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

**Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 12 hours.**

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

- Coveralls
- Chemical-resistant gloves, Category C, such as barrier laminate; butyl rubber  $\geq$  14 mils; nitrile rubber  $\geq$  14 mils; neoprene rubber  $\geq$  14 mils; polyvinyl chloride (PVC)  $\geq$  14 mils; or Viton<sup>®</sup>  $\geq$  14 mils
- Shoes plus socks

**FAILURE TO FOLLOW DIRECTIONS AND PRECAUTIONS ON THIS LABEL MAY RESULT IN CROP INJURY, POOR INSECT CONTROL, AND/OR ILLEGAL RESIDUES.**

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## **INFORMATION**

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Durivo is a systemic insecticide that controls key lepidopteran insects and listed sucking and chewing insect pests in vegetables. When Durivo is applied to the soil, it is readily taken up by the roots of germinating seedlings or transplants and is rapidly translocated throughout the plant. Because of its systemic activity, Durivo provides excellent residual control of key insect pests in vegetables.

For best performance, always follow these directions:

- Durivo can be applied to the soil during planting or transplanting as an in-furrow spray, transplant hole drench, or narrow surface band above the seedline. In addition, Durivo can be applied after planting or transplanting through drip chemigation, as a hill drench, root zone shank application, or directed post-emergence application. When making post-emergence applications, direct the application at the base of the plant for optimum root uptake.
- The application methods described above allow the insecticide to be absorbed by plant roots. Although Durivo is rapidly taken up by plant roots and rapidly moves throughout the plant, the use of sufficient water volume and root zone placement will ensure that the chemical contacts the roots, resulting in optimal uptake and performance.
- Durivo is a selective insecticide, and is compatible with integrated pest management programs.
- In addition to control of key insect pests on this label, Durivo may aid in the suppression of other pests. Suppression can mean either inconsistent control (good to poor), or consistent control at a level below that generally considered acceptable for commercial control.
- Durivo is safe for listed crops when used in accordance with this label.

## RESISTANCE MANAGEMENT

<b>GROUP</b>	<b>4A</b>	<b>28</b>	<b>INSECTICIDE</b>
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Some insect pests are known to develop resistance to products after repeated use. Because resistance development cannot be predicted, the use of this product should conform to sound resistance management strategies established for the crop and use area. Syngenta encourages responsible product stewardship to ensure effective long-term control of the insects on this label.

Durivo contains a Group 4A insecticide (thiamethoxam, belonging to the neonicotinoid class of chemistry) and a Group 28 insecticide (chlorantraniliprole, belonging to the diamide class of chemistry). Insect biotypes with acquired or inherent resistance to Group 4A or Group 28 insecticides may eventually dominate the insect population if Group 4A or Group 28 insecticides are used repeatedly as the predominant method of control for targeted species. This may result in partial or total loss of control of those species by Durivo or other Group 4A or Group 28 insecticides.

If resistance to this product develops in your area, this product, or other products with a similar mode of action, may not provide adequate control. If poor performance cannot be attributed to improper application or extreme weather conditions, a resistant strain of insect may be present. If you experience difficulty with control and resistance is a reasonable cause, immediately consult your local company representative or agricultural advisor for the best alternative method of control for your area.

### **In order to maintain susceptibility to these classes of chemistry:**

- Avoid using Group 4A and/or Group 28 insecticides exclusively for season-long control of insect species with more than one generation per crop season.
- For insect species with successive or overlapping generations, apply Durivo or other Group 4A and/or Group 28 insecticides using a “treatment window” approach. A treatment window is a period of time as defined by the stage of crop development and/or the biology of the pests of concern. Within the treatment window, depending on the length of residual activity, there may either be single or consecutive applications (seed treatment, soil, foliar, unless otherwise stated in the Directions for Use) of the Group 4A and/or Group 28 insecticides. Do not exceed the maximum Durivo allowed per growing season.
- Following a treatment window of Group 4A and/or Group 28 insecticides, rotate to a treatment window of effective products with a different mode of action before making additional applications of Group 4A and/or Group 28 insecticides.
- A treatment window rotation, along with other IPM practices for the crop and use area, is considered an effective strategy for preventing or delaying a pest’s ability to develop resistance to these classes of chemistry.
- If resistance is suspected, do not reapply Durivo or other Group 4A or Group 28 insecticides.

### **Other Insect Resistance Management (IRM) practices include:**

- Incorporating IPM techniques into your insect control program.
- Monitoring treated insect populations for loss of field efficacy.
- Using tank-mixtures or premixes with insecticides from a different target site of action group as long as the involved products are all registered for the same crop outlet and effective rates are applied.

**For additional information on Insect Resistance Management:**

- Contact your local extension specialist, certified crop advisor and/or product manufacturer for additional insect resistance management recommendations.
- Visit the Insecticide Resistance Action Committee (IRAC) on the web at <http://www.irac-online.org/>.

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## **APPLICATION PROCEDURES**

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### **SOIL APPLICATION**

Select spray nozzles or metering orifices which will provide accurate and uniform deposition. Durivo can be applied to the soil during planting or transplanting as an in-furrow spray, transplant hole drench, or narrow surface band above the seedline. In addition, Durivo can be applied after planting or transplanting through drip chemigation, as a hill drench, as a root zone shank application, or as a directed post-emergence application. When making post-emergence applications, direct the application at the base of the plant for optimum root uptake.

The application methods described above allow the insecticide to be absorbed by plant roots. Although Durivo is rapidly taken up by plant roots and rapidly moves throughout the plant, the use of sufficient water volume and root zone placement will ensure that the chemical contacts the roots, resulting in optimal uptake and performance.

To help ensure accuracy, calibrate sprayer before each use. For information on spray equipment and calibration, consult sprayer manufacturers and/or State Extension Service specialists.

**Do not apply Durivo as a broadcast foliar spray with ground or aerial equipment.**

### **Drip (trickle) Chemigation**

Applications of Durivo alone or in combination with other pesticides registered for application through drip irrigation systems may be applied in irrigation water at rates specified on this label. This product may be applied only through drip type irrigation systems. Do not apply Durivo through any other type of irrigation system. Do not allow pooling of irrigation water.

## Directions for Specified Irrigation Systems

### Uniform Water Distribution and System Calibration

The irrigation system must provide uniform distribution of treated water. Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water. The system must be calibrated to uniformly apply the rates specified. If you have questions about calibration, contact State Extension Service specialists, equipment manufacturers, or other experts. A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

Dilute Durivo in the solution tank at a ratio of at least 5 parts of water to one part of Durivo. Injecting a larger volume of a more dilute solution will usually result in a more accurate calibration of the metering equipment. Meter the insecticide into the irrigation water during the irrigation cycle.

**Using Water from Public Water Systems:** DO NOT APPLY DURIVO THROUGH ANY IRRIGATION SYSTEM **PHYSICALLY CONNECTED** TO A PUBLIC WATER SYSTEM. Public water system means a system for the provision to the public of piped water for human consumption, if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year. Durivo may be applied through irrigation systems, which may be **supplied** by a public water system **only if** the water from the public water system is discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and to top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe. Before beginning chemigation, always make sure that the air gap exists and that there is no blockage of the overflow of the reservoir tank.

Any irrigation system using water supplied from a public water system must also meet the following requirements.

### Operating Instructions FOR DRIP IRRIGATION SYSTEMS

1. The system must be calibrated to uniformly apply the rates specified. If you have questions about calibration, contact State Extension Service specialists, equipment manufacturers, or other experts.
2. The system must contain a functional check-valve, vacuum relief valve, and low-pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.

3. The pesticide injection pipeline must contain a functional, automatic, quick-closing check-valve to prevent the flow of fluid back toward the injection pump.
4. The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
5. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
6. The irrigation line or water pump must include a functional pressure switch, which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
7. Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump, or a Venturi injector), effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
8. The pesticide injection pipeline must be on the downstream (field) side of the system filters to avoid potential pesticide off-site contamination or misapplication as a result of the filter back-flushing process.
9. Have a dedicated pesticide injection tank for chemigation purposes rather than tank-mixing pesticides with fertilizers or other non-pesticide chemigation products. This reduces the potential for incompatibility issues which could result in misapplication.
10. Make Durivo injections into the center of the water pipe for a thorough and quick mix. This can be accomplished with an "injection tube" which should contain a check valve.

### **Application Instructions**

Durivo must be applied on the schedule specified in the **Crop Use Directions**, not according to the drip irrigation schedule. The following calibration and application techniques are provided for user reference, but do not constitute a warranty of fitness for application through drip type irrigation equipment. Check with state and local regulatory agencies for potential use restrictions before applying any agricultural chemicals through irrigation equipment.

1. Each run of the irrigation system must be calibrated separately to determine the time it takes water to move through the system and to make sure all emitters in the system are putting out the same amount of water.
2. Use only pressure injection or Venturi equipment.

3. Determine the area to be treated in each irrigation run.
4. Measure the output of each of the emitters or drip tubes closest to and farthest from the injection point.
5. For calibration, substitute a concentrated detergent (such as Wisk) for the Durivo mixture in the injector (solution) tank. It is important to use the same volume of soap solution as the planned volume of Durivo solution when calibrating the system. The detergent will bubble as it leaves the emitters. The time period over which the bubbles occur should be checked for both the closest and farthest emitters. If these times are not within 2 minutes of each other, adjust the dilution ratio and/or the injection rate.

### **Step-by-Step Calibration and Application Instructions**

1. Before starting to calibrate, operate the system until all of the emitters are putting out at equal flow rates or until the system is operating at full pressure.
2. Make up an indicator solution of detergent or fertilizer, using the same rate of indicator as the planned volume of Durivo to be used in the mix.
3. Set the injector to apply the indicator solution at the injection rate to be used in the actual Durivo application.
4. Attach a 12-inch length of flexible tubing over the emitter closest to the injection point, another 12-inch length over the emitter farthest away. Monitor both emitters to determine the time intervals that the indicator solutions are observed.
5. Begin injecting the indicator solution. Direct the flow from the flexible tubes into a small container. Begin timing when the indicator solution is first detected. Stop timing when the indicator solutions are no longer detected in the container.
6. If the period of detection of the indicator solution between the near and far emitter is within 2 minutes, comparable coverage will be obtained. If they are not, make adjustments by increasing the dilution ratio, using more water per part of Durivo, or adjust the injector to a slower flow rate.
7. Once the system is calibrated, dilute the needed amount of Durivo with water and any other tank mix partners in the injection tank at a minimum dilution of 15 parts water to 1 part Durivo. Follow the directions for mixing and equipment set up in the **Mixing Procedures** section of this label for complete details.
8. Do not begin to inject Durivo into the system until all emitters are producing equal flow rates, or until the system is at full pressure.

9. Inject the Durivo solution into the system in the middle of the irrigation set in ½-1 inch of irrigation water.

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## MIXING PROCEDURES

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Prepare no more injector tank mixture than is needed for the immediate operation. Thoroughly clean drip irrigation equipment before using this product. Vigorous agitation is necessary for proper dispersal of the product. Maintain maximum agitation throughout the drip irrigation operation. Do not let the injector tank mixture stand overnight in the injector tank. Flush the drip irrigation equipment thoroughly following each use and apply the rinsate to a previously treated area. Keep product container tightly closed when not in use.

**Durivo Alone:** Add 1/2 of the required amount of water to the mix tank. With the agitator running, add the Durivo to the tank. Continue agitation while adding the remainder of the water. Begin application of the solution after the Durivo has completely dispersed into the mix water. Maintain agitation until all of the mixture has been applied.

**Durivo + Tank Mixtures:** Add 1/2 of the required amount of water to the mix tank. Start the agitator running before adding any tank mix partners. Add tank mix partners in this order: products packaged in water-soluble packaging, wettable powders, wettable granules (dry flowables), liquid flowables such as Durivo, liquids and emulsifiable concentrates. Always allow each tank mix partner to become fully dispersed before adding the next product. Provide sufficient agitation while adding the remainder of the water. Maintain agitation until all of the mixture has been applied.

**Note:** When using Durivo in tank mixtures, add all products in water-soluble packaging to the tank before any other tank mix partner, including Durivo. Allow the water-soluble packaging to completely dissolve and the product(s) to completely disperse before adding any other tank mix partner to the tank.

If using Durivo in a tank mixture, observe all directions for use, crop/sites, use rates, dilution ratios, precautions, and limitations that appear on the tank mix product label. Do not exceed any label dosage rate, and follow the most restrictive label precautions and limitations. Do not mix this product with any product that prohibits such mixing. Tank mixtures or other applications of products referenced on this label are permitted only in those states in which the referenced products are labeled.

**Compatibility:** Durivo is compatible with most commonly used pesticides and nutritional sprays. However, since it is not possible to test all possible mixtures, the user should pre-test to insure the physical compatibility and lack of phytotoxic effect of any proposed mixtures with Durivo. To determine the physical compatibility of Durivo with other products, use a jar test, as described below.

Using a quart jar, add the proportionate amounts of the products to 1 qt. of water. Add wettable powders and water-dispersible granular products first, then liquid flowables, and emulsifiable concentrates last. After thoroughly mixing, let stand for at least 5 minutes. If the combination remains mixed or can be remixed readily, it is physically compatible. Once compatibility has been proven, use the same procedure for adding required ingredients to the injector tank.

The crop safety of all potential tank mixes on all crops has not been tested. Confirm the safety to the target crop before applying any tank mixture not specified on this label.

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### CROP USE DIRECTIONS

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Crop	Pest	Rate Per Acre Per Application
<b><i>Brassica (Cole) Leafy Vegetables</i></b>		
<b>Head &amp; Stem <i>Brassica</i></b> Broccoli Broccoli, Chinese (gai lon) Brussels sprouts Cabbage Cabbage, Chinese (napa) Cabbage, Chinese mustard (gai choy) Cauliflower Cavalo broccolo Kohlrabi  <b>Leafy <i>Brassica</i> Greens</b> Broccoli raab (rapini) Cabbage, Chinese (bok choy) Collards Kale Mizuna Mustard greens Mustard spinach Rape greens	Aphids Beet Armyworm Cabbage Looper Cabbage Webworm Corn Earworm Diamondback Moth Fall Armyworm Flea Beetles Imported Cabbageworm Southern Cabbageworm Thrips Whiteflies Yellowstriped Armyworm	10.0 – 13.0 fl oz/A

#### Use Restrictions

- **Maximum Durivo Allowed per Growing Season:** Do not exceed a total of 13.0 fl oz/A (0.257 lb ai/A) of Durivo or 0.172 lb ai of thiamethoxam-containing products or 0.2 lb ai of chlorantraniliprole-containing products per acre per growing season.
- **Application Rate:** Use lower rates for short residual control and higher rates within the listed rate range for long residual control. See rate conversion chart for rate per 1000 linear feet.
- **Application Number:** Make only one soil application per crop season.
- **Application Timing and Method:** Apply specified dosage in sufficient water volume using one of the following methods:

1. Apply to the soil during planting or transplanting as an in-furrow spray or transplant hole drench at the seeding or transplant depth, or a narrow surface band above the seedline during planting. For surface-banded applications, incorporate to the seeding depth with sufficient sprinkle or drip irrigation within 24 hours.
2. Apply after planting or transplanting as a hill drench or directed post-emergence application using sufficient water volume to ensure incorporation into the root zone. When making post-emergence applications, direct the application at the base of the plant for optimum root uptake.
3. In drip (trickle) chemigation
4. Shank into the root zone after establishment or transplanting using fertilizer knives or other similar equipment. After application, incorporate with enough irrigation to move the chemical to the root zone.

For planting systems where multiple rows are planted on beds, apply Durivo according to one of the above methods.

- **Pre-Harvest Interval (PHI):** 30 Days

**Refer to Resistance Management section.**

Crop	Pest	Rate Per Acre Per Application
<p><b>Cucurbit Vegetables</b>                      Chayote                      Chinese waxgourd                      Citron melon                      Cucumber                      Gherkin                      Gourd, edible (hyotan, cucuzza, hechima, Chinese okra)  <i>Momordica</i> species (balsam apple, balsam pear, bittermelon, Chinese cucumber)                      Muskmelon (hybrids and/or cultivars of <i>Cucumis melo</i>) includes true cantaloupe, cantaloupe, casaba, Crenshaw melon, golden pershaw melon, honeydew melon, honey balls, mango melon, Persian melon, pineapple melon, Santa Claus melon, and snake melon)                      Pumpkin                      Squash: summer (crookneck squash, scallop squash, straightneck squash, vegetable marrow, zucchini) and winter (butternut squash, calabaza, hubbard squash, acorn squash, spaghetti squash)                      Watermelon (includes hybrids and/or varieties of <i>Citrullus lanatus</i>)</p>	<p>Aphids                      Cucumber Beetles<sup>1</sup>                      Flea Beetles                      Leafhoppers                      Leafminers<sup>1</sup>                      Melonworm                      Pickleworm                      Thrips                      Whiteflies</p>	<p>10.0 – 13.0 fl oz/A</p>

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  3. In drip (trickle) chemigation
  4. Shank into the root zone after establishment or transplanting using fertilizer knives or other similar equipment. After application, incorporate with enough irrigation to move the chemical to the root zone.For planting systems where multiple rows are planted on beds, apply Durivo according to one of the above methods.
- **Pre-Harvest Interval (PHI):** 30 Days
- **Pest Control:** <sup>1</sup>Suppression.

**Refer to Resistance Management section.**

Crop	Pest	Rate Per Acre Per Application
<b>Fruiting Vegetables</b>  Eggplant Groundcherry Pepino Peppers: bell, chili, cooking pimento, and sweet Tomatillo Tomato	Aphids Beet Armyworm Colorado Potato Beetle Fall Armyworm Flea Beetles Hornworm species Leafhoppers Leafminers <sup>1</sup> Loopers Potato Psyllid Southern Armyworm Thrips Tomato Fruitworm Tomato Pinworm Whiteflies Yellowstriped Armyworm	10.0 – 13.0 fl oz/A

**Use Restrictions**

- **Maximum Durivo Allowed per Growing Season:** Do not exceed a total of 13.0 fl oz/A (0.257 lb ai/A) of Durivo or 0.172 lb. a.i. of thiamethoxam containing products or 0.2 lb ai of chlorantraniliprole-containing products per acre per growing season.
- **Application Rate:** Use lower rates for short residual control and higher rates within the listed rate range for long residual control. See rate conversion chart for rate per 1000 linear feet.
- **Application Number:** Make only one soil application per crop season.
- **Application Timing and Method:** Apply specified dosage in sufficient water volume using one of the following methods:
  1. Apply to the soil during planting or transplanting as an in-furrow spray or transplant hole drench at the seeding or transplant depth or a narrow surface band above the seedline during planting. For surface-banded applications, incorporate to the seeding depth with sufficient sprinkle or drip irrigation within 24 hours.
  2. Apply after planting or transplanting as a hill drench, or directed post-emergence application using sufficient water volume to ensure incorporation into the root zone. When making post-emergence applications, direct the application at the base of the plant for optimum root uptake.
  3. In drip (trickle) chemigation
  4. Shank into the root zone after establishment or transplanting using fertilizer knives or other similar equipment. After application, incorporate with enough irrigation to move the chemical to the root zone.

For planting systems where multiple rows are planted on beds, apply Durivo according to one of the above methods.
- **Pre-Harvest Interval (PHI):** 30 Days
- **Pest Control:** <sup>1</sup>Suppression

**Refer to Resistance Management section.**

Crop	Pest	Rate Per Acre Per Application
<b>Leafy Vegetables</b> Amaranth Arugula (roquette) Cardoon Celery Celery, Chinese Celtuce Chervil Chrysanthemum: edible- leaved and garland Corn Salad Cress: garden and upland (yellow rocket, winter cress) Dandelion Dock (sorrel) Endive (escarole) Fennel, Florence (finochio) Lettuce: head and leaf Orach Parsley Purslane: garden and winter Radicchio (red chicory) Rhubarb Spinach including New Zealand and Vine (Malabar, Indian) Swiss chard	Aphids Beet Armyworm Cabbage Looper Corn Earworm Diamondback Moth Fall Armyworm Flea Beetles Imported Cabbageworm Leafhoppers Leafminers <sup>1</sup> Whiteflies	10.0 – 13.0 fl oz/A

### Use Restrictions

- **Maximum Durivo Allowed per Growing Season:** Do not exceed a total of 13.0 fl oz/A (0.257 lb ai/A) of Durivo or 0.172 lb ai of thiamethoxam-containing products or 0.2 lb ai of chlorantraniliprole-containing products per acre per growing season.
- **Application Rate:** Use lower rates for short residual control and higher rates within the listed rate range for long residual control. See rate conversion chart for rate per 1000 linear feet.
- **Application Number:** Make only one soil application per crop season.
- **Application Timing and Method:** Apply specified dosage in sufficient water volume using one of the following methods:
  1. Apply to the soil during planting or transplanting as an in-furrow spray or transplant hole drench at the seeding or transplant depth or a narrow surface band above the seedline during planting. For surface-banded applications, incorporate to the seeding depth with sufficient sprinkle or drip irrigation within 24 hours.
  2. Apply after planting or transplanting as a hill drench, or directed post-emergence application using sufficient water volume to ensure incorporation into the root zone. When making post-emergence applications, direct the application at the base of the plant for optimum root uptake.
  3. In drip (trickle) chemigation.
  4. Shanked into the root zone after establishment or transplanting using fertilizer knives or other similar equipment. After application, incorporate with enough irrigation to move the chemical to the root zone.For planting systems where multiple rows are planted on beds, apply Durivo according to one of the above methods.
- **Pre-Harvest Interval (PHI):** 30 Days
- **Pest Control:** <sup>1</sup>Suppression

**Refer to Resistance Management section.**

Crop	Pest	Rate Per 1,000 Plants
Tobacco	Aphids	0.6 – 1.6 fl oz/1,000 plants
	Flea Beetles Japanese Beetle Tomato Spotted Wilt Virus (TSWV) – Suppression of symptoms	1.0 – 1.6 fl oz/1,000 plants
	Thrips (Suppression)	1.0 fl oz/1,000 plants
	Mole Crickets Tobacco Budworm Tomato Hornworm Tobacco Hornworm Thrips Whiteflies Wireworms	1.6 fl oz/1,000 plants

**Use Restrictions:**

- **Application Timing:** Make only one soil application per season.
- **Application Rate:** Use lower rates for short residual control and higher rates within the listed rate range for long residual control.
- **Application Method:** Apply at transplant using the method described below. Apply specified dosage in sufficient water volume to ensure uniform application.
  1. **Soil Treatment:** Mix appropriate amounts of Durivo in water and drench transplants as they are being placed in the ground.
- **Maximum Durivo Allowed per Growing Season:** Do not exceed a total of 10.0 fl oz/A (0.188 lb ai/A) of Durivo or 0.125 lb ai of soil-applied thiamethoxam-containing products or 0.2 lb ai of chlorantraniliprole-containing products per acre per growing season.
- **Tomato Spotted Wilt Virus (TSWV)** is vectored by thrips and controlling or suppressing thrips can help to reduce TSWV. Use the higher rate within the listed rate range where TSWV pressure is higher.
- **Do not** use an adjuvant with applications of Durivo to tobacco.

**Refer to Resistance Management section.**

### Durivo Conversion Chart for Drip Linear Application

	20"	30"	34"	36"	38"	40"	46"	60"	72"	78"	80"	84"	Row Spacing
	26,136	17,424	15,374	14,520	13,756	13,068	11,363	8,712	7,260	6,702	6,534	6,223	Linear Ft/A
Rate (oz/A)	Rate in ounces. of product per 1,000 linear feet for specified row spacing and rate per acre												lb ai/A
10.0	0.38	0.57	0.65	0.69	0.73	0.77	0.88	1.15	1.38	1.49	1.53	1.61	0.195
11.0	0.42	0.63	0.72	0.76	0.80	0.84	0.97	1.26	1.52	1.64	1.68	1.77	0.215
12.0	0.46	0.69	0.78	0.83	0.87	0.92	1.06	1.38	1.65	1.79	1.84	1.93	0.234
13.0	0.50	0.75	0.85	0.90	0.95	0.99	1.14	1.49	1.79	1.94	1.99	2.09	0.254

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### ROTATIONAL RESTRICTIONS

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Any cover crop planted for erosion control or soil improvement may be planted as soon as practical following the last application. However, the cover crop may not be grazed or harvested for food or feed. For all other rotational crops intended for food or feed, the plant-back intervals listed below must be observed.

#### Immediate Plant-Back Interval:

*Brassica* (cole) leafy vegetables; cucurbit vegetables; fruiting vegetables, leafy vegetables, cotton, Root and Tuber Vegetables (Crop Group 1) except beet, sugar.

#### 30-Day Plant Back Interval:

Alfalfa, Legume vegetables (Crop Group 6), soybean, barley, wheat, sorghum, peanuts and strawberry.

#### 120-Day Plant-Back Interval:

Tops of Root and Tuber Vegetables (Crop Group 2), Bulb Vegetables (Crop Group 3), Cereal Grains (Crop Group 15) except alfalfa, wheat, cowpea, pea, field, okra.

#### 12-month Plant-Back Interval:

All other crops.

## STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal.

### **Pesticide Storage**

Store in a cool, dry place.

### **Pesticide Disposal**

Pesticide wastes may be toxic. Improper disposal of unused pesticide, mixture, or rinse water is a violation of Federal law. If these wastes cannot be used according to label instruction, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance in proper disposal methods.

For minor spills, leaks, etc., follow all precautions indicated on this label and clean up immediately. Take special care to avoid contamination of equipment and facilities during cleanup procedures and disposal of wastes. In the event of a major spill, fire, or other emergency, call 1-800-888-8372, day or night.

### **Container Handling [less than or equal to 5 gallons]**

Non-refillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container  $\frac{1}{4}$  full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures allowed by state and local authorities.

### **Container Handling [greater than 5 gallons - bulk]**

Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the person refilling. To clean container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures approved by state and local authorities.

### **Container Handling [greater than 5 gallons – mini-bulk]**

Non-refillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container  $\frac{1}{4}$  full with water.

Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures approved by state and local authorities.

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For non-emergency (e.g., current product information), call  
Syngenta Crop Protection at 1-800-334-9481.

Manufactured for:  
Syngenta Crop Protection, LLC  
P.O. Box 18300  
Greensboro, North Carolina 27419-8300

SCP 1318-MAS 0911

(Non-detachable container)

Not for sale, sale into, distribution, and/or use in Nassau, Suffolk, Kings, and Queens counties of New York State.

**Durivo®**

**GROUP 4A 28 INSECTICIDE**

Insecticide

For control of listed insect pests infesting specified crops

Active Ingredient:

Thiamethoxam<sup>1</sup> ..... 17.5%

Chlorantraniliprole<sup>2</sup> ..... 8.8%

Other Ingredients: ..... 73.7%

Total: ..... 100.0%

<sup>1</sup>CAS No. 153719-23-4

<sup>2</sup>CAS No. 500008-45-7

Durivo is a soluble concentrate containing 1.67 lb of thiamethoxam and 0.835 lb chlorantraniliprole per gallon.

**KEEP OUT OF REACH OF CHILDREN.**

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

See additional precautionary statements and directions for use in booklet.

**AGRICULTURAL USE REQUIREMENTS**

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. Refer to supplemental labeling under "Agricultural Use Requirements" in the Directions for Use section for information about this standard

EPA Reg. No. 100-1318

EPA Est. XXXXX

SCP 1318-MAS 0911

Net Contents

## PRECAUTIONARY STATEMENTS

### Hazards to Humans and Domestic Animals

#### HOT LINE NUMBER

For 24-Hour Medical Emergency Assistance (Human or Animal) or  
Chemical Emergency Assistance (Spill, Leak, Fire, or Accident),  
Call

**1-800-888-8372**

Have the product container or label with you when calling a poison control center  
or doctor, or going for treatment.

### Environmental Hazards

This pesticide is toxic to wildlife and highly toxic to aquatic invertebrates, oysters and shrimp. Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Drift or runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when cleaning equipment or disposing of equipment wash water. This product is highly toxic to bees exposed to direct treatment on blooming crops or weeds and may cause possible effects to pollinators from exposure to translocated residues in blooming crops. Do not apply this product or allow it to drift to blooming crops or weeds while bees are foraging in/or adjacent to the treatment area.

### STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal.

#### Pesticide Storage

Store in a cool, dry place.

#### Pesticide Disposal

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**Container Handling [greater than 5 gallons – mini-bulk]**

Non-refillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures approved by state and local authorities.

**Refer to Surface Water Advisory, Ground Water Advisory, Physical or Chemical Hazards and Chemigation sections in booklet.**

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Manufactured for:  
Syngenta Crop Protection, LLC  
P.O. Box 18300  
Greensboro, North Carolina 27419-8300

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